# 1.0 INTRODUCTION

## 1.1 TH 14 WEST STUDY AREA

### 1.1.1 Project Description

The Trunk Highway (TH) 14 West Corridor is a two-lane roadway approximately 22 miles in length. Located in Nicollet County, the corridor extends from State Highway 15 just east of New Ulm to County Highway 6 near North Mankato. TH 14 is a major east-west highway in southern Minnesota and plays a major role in the movement of people and goods. This roadway serves a variety of travel demands including mobility to serve commuter, commercial, and truck traffic and access to homes, farms, and commercial retail businesses. The Study Area is shown on **Figure 1.1-1**.

The project is located just north of the Minnesota River connecting the regional trade centers of New Ulm and Mankato and includes the cities of Courtland and Nicollet. Since Nicollet County has preserved much of its agricultural land through a zoning policy that has been in place since 1981, the majority of the land between the cities is rural. The Swan Lake Wildlife Management Refuge is located in an area just north of TH 14 between Courtland and Nicollet and the corridor drops down into the Minnesota River Valley just west of Courtland.

### 1.1.2 Functional Classification

TH 14 is classified as a Principal Arterial, the highest functional class rating. The function of a principal arterial is to connect metropolitan centers to regional business concentrations, with a primary function of mobility.

### 1.1.3 Purpose of the Project

The purpose of the TH 14 West Interregional Corridor (IRC) project is to address present and future safety, operations, and geometric deficiencies along this 22-mile segment of TH 14, consistent with community and public expectations.

## 1.2 HISTORY OF TH 14 WEST

This section describes the role and importance of TH 14 in the regional roadway system from its beginnings as a fur-trading route, as one of the principal routes on the state's trunk highway system established in 1919 by constitutional amendment, to its current day status as a U.S. highway and part of the National Highway System.

May 2003

## Study Area

* The Highway 14 West Interregional Corridor is a two-lane roadway approximately 22 miles long and extends from State Highway 15 just east of New Ulm to County Road 6 near North Mankato in Nicollet County.

* Highway 14 is a major east-west highway in southern Minnesota and plays a major role in the movement of people and goods.

* High crash rates at 3 intersections, lack of passing zones, high percentage of truck traffic, and future levels of congestion indicate a need to improve this section of Highway 14.

New Ulm

Courtland

Nicollet

Nicollet County

Brown County

Blue Earth County

SWAN LAKE

MIDDLE LAKE

MINNESOTA RIVER

T 150

T 166

T 169

T 179

MINNESOTA 15

MINNESOTA 68

MINNESOTA 111

MINNESOTA 99

5 21 12 14 27 37 25 13 24 47 6 42 41 72 77 17 23

### Legend

- U.S. and Minnesota Highways
- County State Aid Highways
- County, Township, and Local Roads
- Railroads
- Streams
- Lakes
- State Parks
- Counties
- Municipalities

N

0 1 2 3 4 5 Miles

Source: Minnesota Department of Transportation

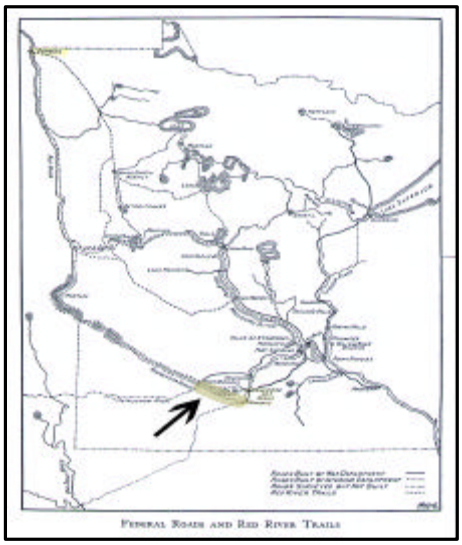
Moving Minnesota

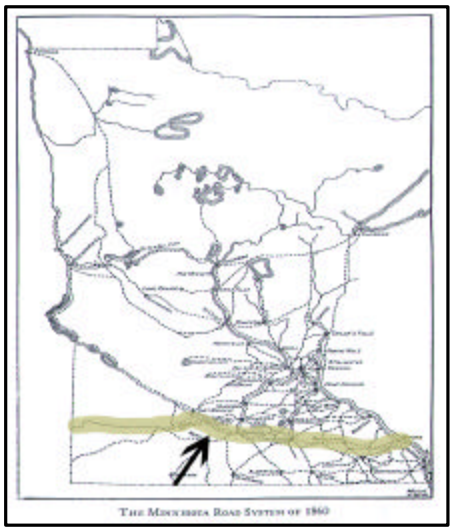
**14 West Interregional Corridor:**
North Mankato to New Ulm

**Figure 1.1-1**
**Study Area Map**

## 1.2.1 Early Roads[1]

This segment of TH 14 had its beginnings as part of the Red River Trails, one of the great wilderness trails laid out during the first half of the nineteenth century by the Red River fur traders. The Red River trails followed the valleys of the Mississippi, Minnesota, and Red Rivers. The first of three main routes to be opened, it led from the very northwest corner of Minnesota along the Red River to Lake Traverse, down the Minnesota Valley from Big Stone Lake to Traverse de Sioux (just north of Mankato), and finally, to Mendota and St. Paul.




In 1849, Henry Hastings Sibley persuaded Congress to appropriate funds for roads in Minnesota, initiating the development of the government roads that formed a network of roads over the whole area of Minnesota. Current day TH 14 was part of the Minnesota Road System of 1860 extending from Winona westward through Rochester, Owatonna, Mankato, New Ulm, and beyond.

## 1.2.2 State Trunk Highway System

The Minnesota trunk highway system was established through a constitutional amendment in 1919 in order to ensure a state funding mechanism to enable the state to take advantage of federal funding opportunities in support of highway construction. This trunk highway system was a single plan and constructed as a coordinated network of through routes and bridges to serve the disparate regions of the state. It was planned, built and maintained by the Minnesota Highway Department and mostly completed within one decade.[2]

[1] *Roads and the Settlement of Minnesota, Arthur J. Larsen, 1940*
[2] *Historical Context, Minnesota State-Wide Survey of Selected Bridges*, The 106 Group LTD.

By November 1920, the Minnesota Trunk Highway system was established by law. Existing TH 14 was at that time called Route No. 7 beginning at a point in Winona and extending westerly to the South Dakota border "affording Winona, . . . Rochester, . . . Owatonna, . . .Mankato, . . . New Ulm, . . .Lake Benton, and intervening and adjacent communities a reasonable means of communication, each with the other and other places within the state."[3]

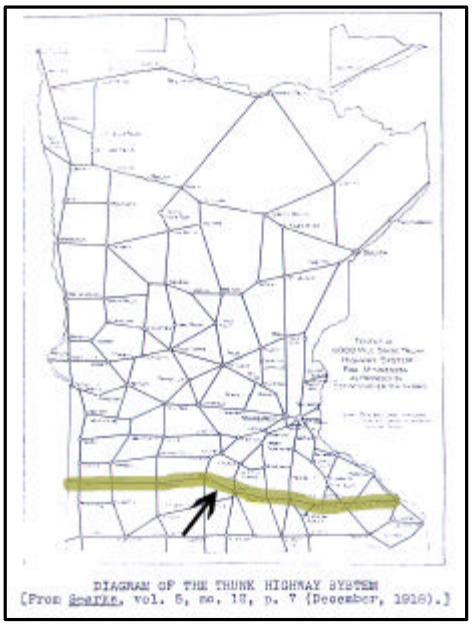


DIAGRAM OF THE TRUNK HIGHWAY SYSTEM
[From Roads, vol. 6, no. 12, p. 7 (December, 1918).]

As stated in the 1920 law, any of the Trunk Highways may be relocated or removed from the system, but connections to the various villages and cities must be maintained. In the vicinity of TH 14, Route Number 122 (existing TH 111) needs to maintain connectivity between Mankato and Gaylord via a portion of TH 14 through Nicollet to a connection with TH 22 just south of New Sweden.

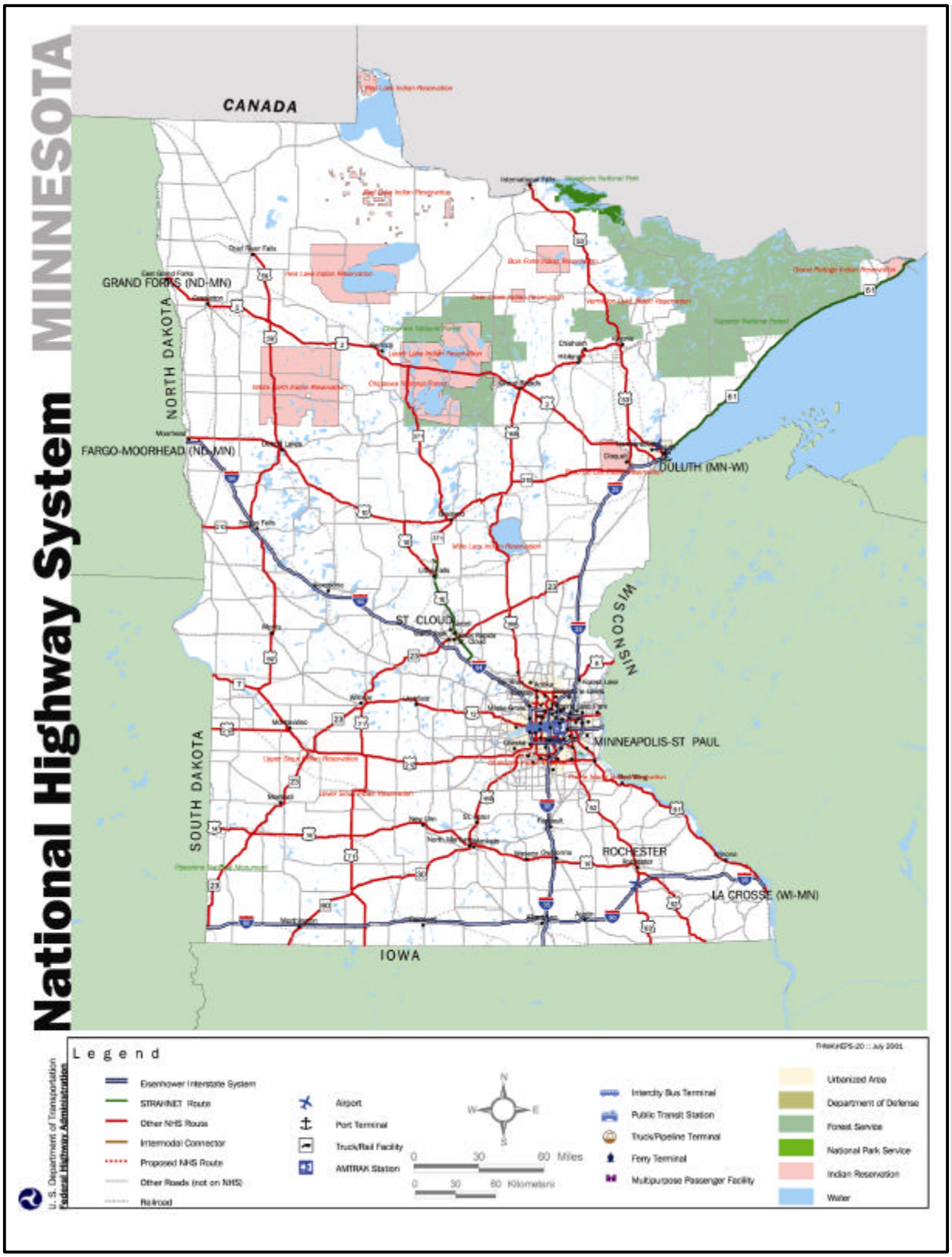
## 1.2.3 National Highway System[4]

TH 14 is a part of the US Department of Transportation's National Highway System (NHS) extending from the South Dakota Border to Rochester. The NHS is approximately 160,000 miles of roadway important to the Nation's economy, defense and mobility. It was developed by the Department of Transportation in cooperation with the states, local officials, and metropolitan planning organizations (MPOs). The NHS designation for TH 14 is as an "Other Principal Arterial: These are highways in rural and urban areas which provide access between an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility." (**Figure 1.2-1**)

## 1.2.4 Mn/DOT Interregional Corridor System

The Interregional Corridor (IRC) System adopted by Mn/DOT in January 2000 identifies roadway corridors that tie the state together by connecting people with jobs, distributors with manufacturers, shoppers with retailers, and tourists with recreational opportunities. The goal of the IRC System is to provide efficient connections among regional trade centers. Mn/DOT's IRC System is made up of 2,930 miles of the approximately 130,000 road miles in Minnesota. Although this represents only 2% of the road miles, these roadways carry one-third of all the vehicle miles traveled in the state. The use of these highways continues to increase. **Figure 1.2-2** shows the IRC system.

[3] *Constitution of the State of Minnesota, Article XIV, Public Highway System*
[4] *US Department of Transportation, Federal Highway Administration*




14 West IRC

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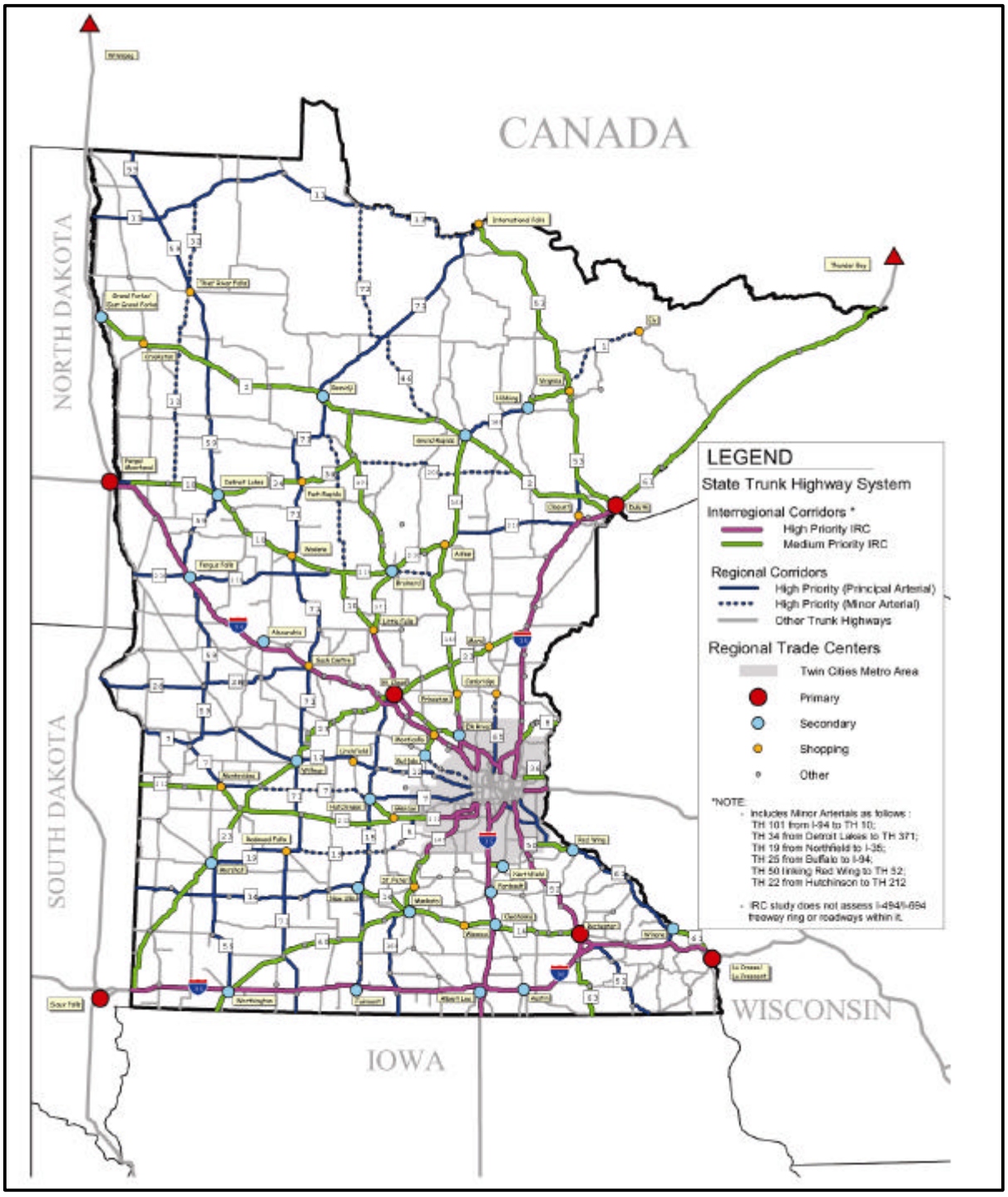
**Figure 1.2-1**
**National Highway System**




14 West IRC

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**Figure 1.2-2**
**Interregional Corridor System Map**

TH 14 plays a major role in the movement of goods and people. TH 14 is a primary truck route for heavy commercial vehicles that carry freight to local, regional, intrastate, and interstate destinations. This segment of TH 14 has 10 to 15 percent heavy commercial vehicles.

Mn/DOT has identified TH 14 as a Medium Priority Interregional Corridor connecting the secondary trade centers of New Ulm and Mankato. The Interregional Corridor System identified the TH 14 West IRC roadway as one of the high risk corridors for signal proliferation and an increase in traffic.

## 1.3 VISION STATMENT

Mn/DOT and the communities along the TH 14 West Corridor worked together to establish a shared vision of how the corridor will look and function into the future. The development of the Vision Statement for the TH 14 West Corridor has been an evolving process. It has helped guide the development of the alternatives and the evaluating criteria. The TH 14 West vision for the corridor follows.

**TH 14 WEST INTERREGIONAL CORRIDOR**
**VISION STATEMENT**

**A Focus on Mobility, Safety, Access, Balance, and Partnership**

The *Vision* for the TH 14 West Interregional Corridor is to achieve a balance between regional mobility and local circulation. The balance point will be responsive to interregional connectivity goals and local community needs.

The *Vision* is to achieve interregional system goals for speed and safety as well as to improve local circulation. Mobility should be addressed by providing a high quality of traffic flow and better managing access from adjacent land uses with a high priority on safety. Consistency with local land use plans is critical to implementation.

The path from *Vision* to *Reality* is dependent on a partnership among all stakeholders to achieve a balanced mobility. Cities, Counties, Mn/DOT, other state and local agencies, and the corridor stakeholders will need to plan and work together to achieve this goal.

## 1.4 GOALS AND OBJECTIVES

The Goals and Objectives were developed with input and guidance from the Advisory Committee and the Project Management Team and reinforce the Purpose of the project. Measures of Effectiveness were developed to evaluate the effectiveness of each alternative identified and to determine which alternatives would be carried forward into an environmental review process. The development and evaluation of alternatives is in Chapter 5. The following are the five goals for the TH 14 West project, each with their objectives and measures of effectiveness:

**Goal 1: Safety** - ***Provide safe operating conditions throughout the corridor consistent with Mn/DOT guidelines***

- Minimize the number and severity of crashes
  - Ability to meet crash rates for similar facilities in the state
  - Ability to meet crash rates equal to Mn/DOT safety objectives
  - Ability to reduce crash rates at high crash frequency locations
- Minimize conflicts between modes (vehicles/bikes/peds)
  - Ability to enhance pedestrian and bike travel in the corridor
  - Consider ped/bike crossings
  - Reduce truck traffic through the Cities of Courtland and Nicollet
- Provide design consistency along TH 14
  - Ability to meet Mn/DOT Roadway Design Guidelines
  - Ability to achieve Mn/DOT's goal for no-passing zones
  - System consistency with other segments of TH 14, NHS, and IRC guidelines.

**Goal 2: Mobility** - ***Provide level of mobility consistent with the functional classification of the roadway and Mn/DOT's IRC performance target***

- Meet long-term speed and mobility objectives
  - Ability to maintain level-of-service C-D boundary
  - Ability to meet Mn//DOT's IRC performance target of 55+ mph for medium priority corridors.
  - Minimize number of signals
  - Ability to achieve Mn/DOT's signal proliferation guidelines
- Manage Existing and Future Access along the Corridor
  - Ability to comply with Mn/DOT access management policies
  - Ability to support the local roadway system

**Goal 3: Environmental** - ***Preserve key environmental resources in the corridor***

- Avoid or minimize impacts to natural resources
  - Avoid/minimize impacts to the natural geologic features of the Minnesota River Valley
- Minimize impacts to the visual quality of the corridor
- Avoid impacts to cemeteries and community facilities
- Avoid/minimize impacts to wetlands, parks, protected waters
- Avoid/minimize impacts to cultural resources

**Goal 4: Social – *Maintain consistency with local land use plans***

- Preserve right-of-way for future highway corridor
- Encourage land use planning/zoning to preclude "Leap Frog" development
- Minimize the number of right-of-way impacts
- Maintain community cohesiveness

**Goal 5: Economic– *Support economic vitality in the corridor and region***

- Meet Mn/DOT travel speed objectives for IRC performance targets
  - Ability to provide reliable travel times for freight haulers
  - Maintain year round 10-ton status.
- Provide a cost-effective public investment in the transportation system

## 1.5 PLAN PURPOSE

As part of the development of this Corridor Management Plan (CMP), a comprehensive analysis was conducted of the TH 14 West Corridor from North Mankato to New Ulm. The analysis included roadway design, safety, growth trends, an origin-destination study, and existing and future levels of congestion in the corridor. The purpose of these studies was to determine if there is a need to improve the roadway.

This Corridor Management Plan documents the identification of deficiencies, identification and evaluation of alternatives, and the planning process that occurred during its development. Mn/DOT and the communities along the TH 14 West Corridor worked together to identify issues, deficiencies, and potential solutions for this corridor.

**Organization of the TH 14 West Corridor Management Plan (CMP)**

The TH 14 West CMP is organized into the following chapters:

1.0 Introduction
2.0 Public and Agency Involvement
3.0 Existing and Forecast Conditions
4.0 Identification of Deficiencies
5.0 Development of Alternatives
6.0 Scoping of Alternatives and Staging of Implementation
7.0 Community Resolutions and Agency Comments

After the Introduction, the approach used to engage state and local agencies, local elected officials, the business community, and members of the general public is discussed. The existing and forecast conditions are then documented and analyzed, along with forecasts of traffic conditions projected for year 2025. Next, the results of the existing and forecast condition analysis are used to document a variety of deficiencies in the corridor. Based on the deficiencies, a universe of conceptual alternatives for improvements to the TH 14 West Corridor are identified and evaluated to address the purpose and need for the project. The universe of design and location alternatives was taken through the formal scoping process to

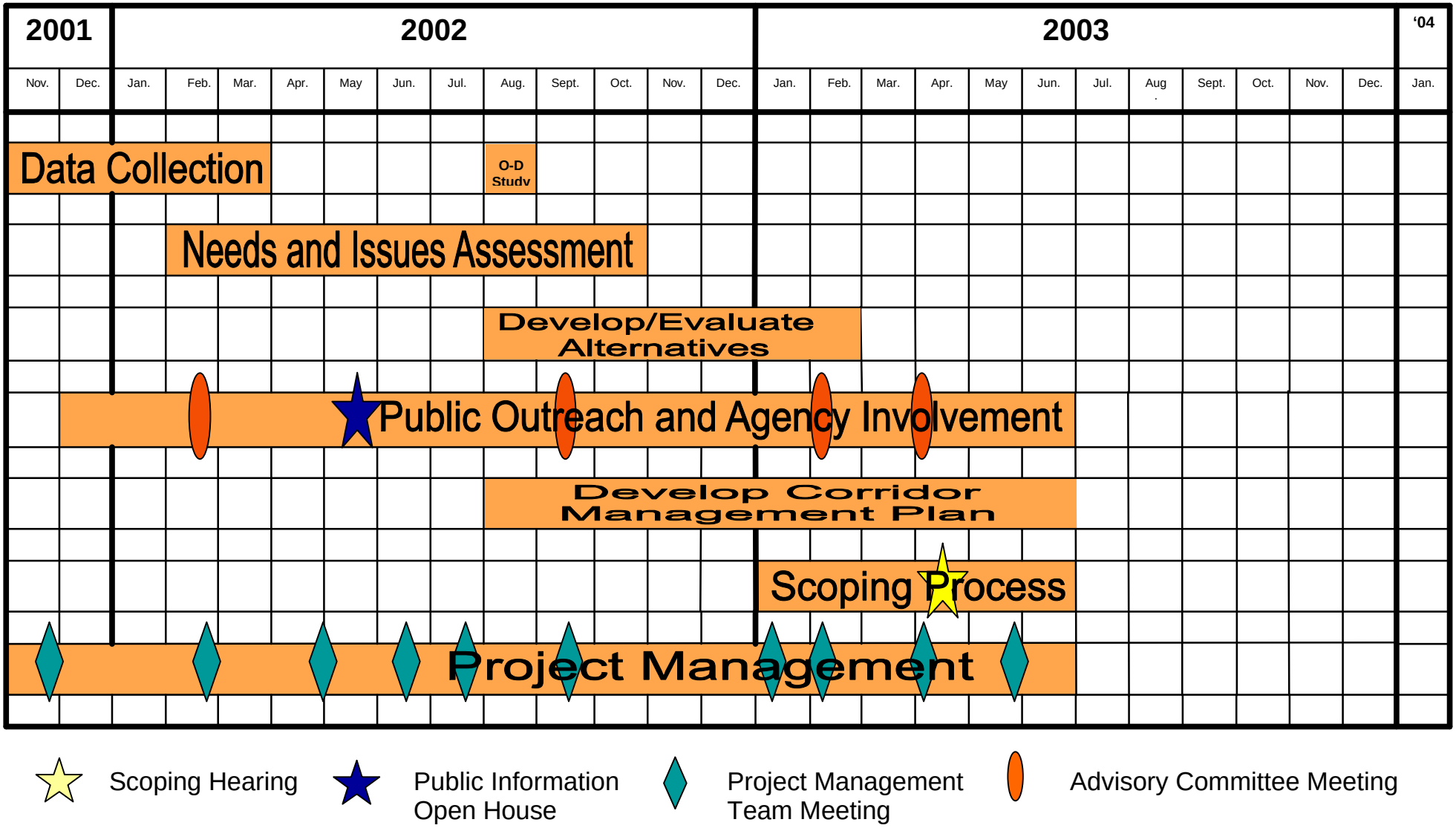
determine which alternatives would be carried forward into an environmental review. Then the projects are prioritized and an implementation strategy is provided. The final chapter documents community and agency support for the project through formal Resolutions of Support for the CMP.

## 1.6 PROJECT SCHEDULE

**Figure 1.6-1** illustrates the timeline for the completion of the TH 14 West Corridor Management Plan and the Scoping process. The schedule identifies the major work tasks completed and the length of time each task required. The data collection was completed during the winter of 2001-2002 that led to the identification of needs and issues during spring 2002 and identification of deficiencies in summer 2002. During the summer/fall of 2002 alternatives were developed and evaluated against the measures of effectiveness. In winter 2003 a draft Corridor Management Plan was circulated to the communities along the corridor for their input.

At this point, the formal Scoping Process began, running concurrently with the CMP during the first six months of 2003. The universe of alternatives, outlined in the CMP, are evaluated through the Scoping process to determine which ones will be carried forward into an environmental document. The TH 14 West Corridor Management Plan was finalized at the end of the Scoping process and distributed in Summer 2003.

During the course of completing the Corridor Management Plan and the Scoping Process, public and agency outreach activities were occurring by holding a series of Advisory Committee and Project Management Team meetings, an open house, public outreach, and scoping hearings. Public and agency outreach is described in Chapter 2 of this plan.




14 West IRC

**Figure 1.6-1**
**Schedule**